**Omental Tubercluosis: A rare presentation of Abdomial TB**

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Abstract

Tuberculosis is a common disease worldwide nearly 10.4 million people fall prey to this disease annually. It is a curable infectious disease but emerged as the major health problem in both developing & under developed countries due to poor socioeconomic status, development of multi drug resistance and poor nutritional status of inhabitants.

**CASE REPORT**

A 15 years old school girl presented in emergency room with severe abdominal pain she was diagnosed as having acute appendicitis and appendectomy was done was discharged home on antibiotics. She again presented after four weeks with jaundice for which an extensive workup was done only LFTSs were deranged rest of the labs were unremarkable. A diagnosis of drug induced liver injury was made, was managed conservatively and discharged as her LFTs returned to normal. Seven months later she again presented with abdominal pain, her ultrasound, clinical examination and labs were normal. Considering her history of alternating constipation and diarrhea with history of stress a provisional diagnosis of Irritable bowel syndrome was made. After three months the patient developed low grade temperature with evening rise associated with abdominal pain and weight loss of 9 Kgs. Patient underwent thorough investigations which showed hemoglobin level of 10.9, white cell counts 10.45, platelet count of 450, CRP 29.8, LFTs normal, TB Mycotot negative, ultrasound abdomen showed...
minimal fluid in the right and left iliac fossa, tumor markers CA19-9 and CA125 normal and urine complete was also normal. Patient underwent a CT thorax abdomen pelvis with contrast which showed nodular peritoneal disease with Omental-mesenteric thickening besides mesenteric lymphadenopathy. Lymph nodes measuring 11 mm in short axis, the changes were supportive of an infective peritonitis most probably granulomatous disease which required histological confirmation. The patient was referred to the surgical team for laparoscopic biopsy (Pic 1, 2, 3). Biopsy report shows granulomatous inflammation, positive for acid fast bacilli. She was diagnosed as case of Omental Tuberculosis. Anti-tuberculous therapy consisting of isoniazid rifampicin pyrazinamide ethambutol along with pyridoxine was started and she was put on regular follow up. Patient began to improve symptomatically and she gained 4 kgs. After the initial phase of therapy with 4 drugs regimen, she was continued on a 3 drug regimen (Rifampicin, Isoniazid, Ethambutol) for further 7 months. A CT Abdomen was done after 3 months which showed regression of the disease. Patient's symptoms settled down and she continued to gain weight with improvement in her appetite. Her inflammatory markers also returned to normal.

A further CT abdomen with contrast done at the end of the 9 months therapy showed a normal omentum and complete resolution of mesenteric lymphadenopathy with complete resolution of the disease. Patient gained 12 kgs of weight and was completely symptom free.

Discussion

Though TB can affect any part of body, but TB affecting the Omentum is a rare occurrence. It can present as part of Abdominal & Peritonium TB and is usually classified as a Fibrotic-Fixed Type, but isolated cases have also been seen.

Tubercular Peritonium can however occur as
(a) Wet- Ascitic Type
(b) Fibrotic Fixed Type and
(c) Dry Plastic Type

Peritoneal tuberculosis can present in any of the above described forms.

Our case was of DRY PLASTIC TYPE characterized by nodular peritoneal disease with Omental-mesenteric thickening and mesenteric lymphadenopathy.

Pelvic peritoneal tuberculosis is not an uncommon extrapulmonary site in young females and the symptoms mimic an advanced ovarian malignancy, it makes it challenging for the treating physician to come to definite diagnosis.

Abdominal Tuberculosis may present as enteric tuberculosis in which the intestine is involved, nodal in which lymph nodes are involved, peritoneal, solid visceral in which the viscera like liver, spleen, kidney get involved. Abdominal tuberculosis may present as combination of these varieties as well.

The most common symptoms with which it Omental Tuberculosis presents are abdominal pain (92%) and ascites (96%). Besides these symptoms they may have weakness (81%), anorexia (45%), night sweats (36%) some of the patients may have elevated CA125 levels which can misguide the treating physicians. In most cases the Tuberculin skin test and Mycodot may be negative as in above mentioned case so it makes it very challenging to pick up a case of peritoneal tuberculosis. Omental tuberculosis is a rare presentation and is challenging to diagnose for a physician. Invasive procedures like laparoscopy and omental biopsies are needed to get to a final diagnosis. Abdominal tuberculosis (especially peritoneal and omental) should be considered in differential diagnosis if the patient presents with vague gastrointestinal symptoms, since it presents with nonspecific symptoms the diagnostic criterions are very few and we have to get help from additional tests in making a final diagnosis. The histopathological studies have been proven to be most beneficial in cases of peritoneal tuberculosis and should be combined with molecular analysis to diagnose difficult cases of peritoneal tuberculosis. In developing countries like...
Pakistan it becomes challenging to reach a definite diagnosis due to the poor socioeconomic conditions and lack of insight as most patients refuse the invasive tests like laparoscopy. It’s still a diagnostic dilemma which needs to be addressed and people should be educated about benefits of such invasive tests and prompt treatment in these difficult cases.

References